

1. A method of detecting a data transmission comprising a known training sequence that has been received from a channel, comprising the steps of:
 - selecting a detection parameter set from a table comprising a plurality of detection parameter sets, wherein the selection is based upon the known training sequence of the data transmission;
 - configuring a receiver using the selected detection parameter set; and
 - using the receiver configured with the selected detection parameter set to receive the data transmission.

3. The method according to claim 2, wherein the synchronization technique is a maximum window value synchronization technique.

5. The method according to claim 1, wherein the detection parameter set comprises a channel model.

20 7. The method according to claim 5, wherein the channel model is a channel model including a DC component.

8. The method according to claim 1, wherein the detection parameter set comprises an equalization technique.

10. The method according to claim 8, wherein the equalization technique is Viterbi equalization.

12. The method according to claim 1, wherein the detection parameter set comprises a channel estimation technique.

14. The receiver according to claim 13, wherein the detection parameter set comprises a synchronization technique, and the synchronization unit is configured in accordance with the synchronization technique.

16. The receiver according to claim 14, wherein the synchronization technique is a center of gravity synchronization technique.

5 19. The receiver according to claim 17, wherein the channel model is a channel model including a DC component.

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21. The receiver according to claim 20, wherein the equalization
10 technique is DFE equalization.

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23. The receiver according to claim 20, wherein the equalization technique is DFSE equalization.

23. The receiver according to claim 20, wherein the equalization technique is DFSE equalization.

15 24. The receiver according to claim 13, wherein the detection
parameter set comprises a channel estimation technique.